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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/534,196	03/24/2000	Christian Francois Michel Dujarric	Q58472	2963
7590		07/02/2004	EXAMINER	
Sughrue Mion Zinn Macpeak & Seas PLLC		KOCZO JR, MICHAEL		
Robert J Seas		ART UNIT		
2100 Pennsylvania Avenue N W		PAPER NUMBER		
Washington, DC 20037-3202		3746		

DATE MAILED: 07/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/534,196

Applicant(s)

DUJARRIC, CHRISTIAN  
FRANCOIS MICHEL

Examiner

Michael Kocz, Jr.

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3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 2-14 and 16-26 is/are pending in the application.
- 4a) Of the above claim(s) 8-13 and 20-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-7, 14, 16-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Applicant "requests (elects)" method claims 20-26 to continue in prosecution of this application. Applicant cannot shift inventions in an RCE application.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 20 to 26 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Applicant must file a divisional application in order to have method claims 20 to 26 examined on their merits.

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the structure of claims 4 and 16 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The limitation "orifices consist of two" is interpreted as meaning only two orifices, which is not shown in the drawings.

*Claim Rejections - 35 USC § 112*

Claims 2 to 7 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 14, line 9 recites "a plurality of mutually spaced independent separation triggering elements". It is not understood in what sense the elements are "independent".

Applicant makes reference to page 10 of the amendment of November 24, 2003 to explain the intended meaning of "independent". However, applicant's explanation is in the remarks section of the amendment, not in the specification, and therefore does not remedy this deficiency.

Claim 6 recites the distance D as a function of the location of spontaneous separation of flow at sea level. However, the location of spontaneous flow is a function of operating parameters such as the pressure and velocity of the gas within the rocket nozzle, which parameters are beyond the scope of the claim. This renders the claim indefinite.

*Claim Rejections - 35 USC § 102*

Claims 2, 3, 6, 7, 14, 18 and 19, as understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Mueller. Mueller discloses a plurality of mutually spaced separation triggering elements (for example holes 220 in figure 5) positioned on an injection cross section of the divergent nozzle body perpendicular to the axis of the nozzle body, and a means for simultaneously injecting fluid through the mutually spaced separation triggering elements of said injection cross section of the divergent nozzle body. Whether or not a three dimensional

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separation of flow occurs is merely a desired result, and is furthermore dependent on operational parameters, such as injection pressure, and the pressure and velocity of the gas in the nozzle, for example. Therefore, under the right conditions, the structure of Mueller is deemed inherently capable of inducing distinct zones of jet separation.

Claims 2, 3, 6 and 14, as understood, are also rejected under 35 U.S.C. 102(b) as being anticipated by Rannie et al. (see injection holes in figures 4 and 8). Whether or not a three dimensional separation of flow occurs is merely a desired result, and is furthermore dependent on operational parameters, such as injection pressure, and the pressure and velocity of the gas in the nozzle, for example. Therefore, under the right conditions, the structure of Rannie et al. is deemed inherently capable of inducing distinct zones of jet separation.

Claims 2, 3, 4, 6, 14 and 16, as understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Pennington (note diametrically opposed injection holes 26 in figure 2). Whether or not a three dimensional separation of flow occurs is merely a desired result, and is furthermore dependent on operational parameters, such as injection pressure, and the pressure and velocity of the gas in the nozzle, for example. Therefore, under the right conditions, the structure of Pennington is deemed inherently capable of inducing distinct zones of jet separation.

Claims 2, 3, 5, 6, 14 and 17, as understood are rejected under 35 U.S.C. 102(b) as being anticipated by Wilhite (note the three injection orifices in figure 4). Whether or not a three dimensional separation of flow occurs is merely a desired result, and is furthermore dependent on operational parameters, such as injection pressure, and the pressure and velocity of the gas in the nozzle, for example. Therefore, under the right conditions, the structure of Wilhite is deemed inherently capable of inducing distinct zones of jet separation.

### *Response to Arguments*

Applicants arguments merely point out differences in operation of the nozzles of the prior art and that of the claims. However, applicant fails to point out how the claims define structurally over the prior art.

### *Conclusion*

Claims 8 to 13 and 20 to 26 stand withdrawn from further consideration as being drawn to non-elected inventions and species.

This is a continuation (RCE) application. All claims are drawn to the same invention claimed prior to filing of the RCE application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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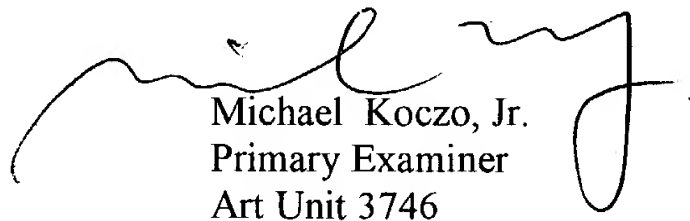
Any inquiry relating to the status of this application or proceeding should be directed to the Customer Service Office whose telephone number is 703-306-5648.

Any inquiry relating to patent applications in general should be directed to the Patent Assistance Center at 1-800-786-9199.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Kocz, Jr. whose telephone number is 703-308-2630. The examiner can normally be reached on M-F; 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu can be reached on 703-308-2675. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Michael Kocz, Jr.  
Primary Examiner  
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